



Photo by Jiro Ose/Girl Up



Humanitarian
ENERGY
CONFERENCE

**Safe and Sustainable
Access to Energy for
Crisis-Affected Communities**

EMPOWERING BETTER FUTURES, TOGETHER

2019 CONFERENCE REPORT

Overview



“ Access to energy is a cross-cutting theme that has impacts on protection; food security; health; environment; sexual and gender-based violence; water, sanitation, and hygiene; and education.

*Vincent Parker, UNHCR
Deputy Representative in Ethiopia*



Energy access is a critical and under-served need among the **131 million people** requiring humanitarian assistance today.¹ The global humanitarian system has historically struggled to bring energy aid up to par with food, shelter, and other basic services. However, this story is changing. A diverse and growing community of actors is adopting **innovative approaches and cross-sector partnerships** to improve and expand energy access for cooking, lighting, powering, communications, and other uses in vulnerable communities around the world.

In July 2019, the Clean Cooking Alliance (Alliance) and the UN Institute for Training and Research (UNITAR) hosted the first Humanitarian Energy Conference (HEC) with support from the Norwegian Agency for Development Cooperation (Norad) and Shell International. Over two days, 161 participants from 76 organizations across 28 countries gathered in Addis Ababa, Ethiopia, to learn, exchange knowledge, and collaborate toward achieving the vision of affordable, reliable, sustainable, and modern energy services for all crisis-affected people by 2030.

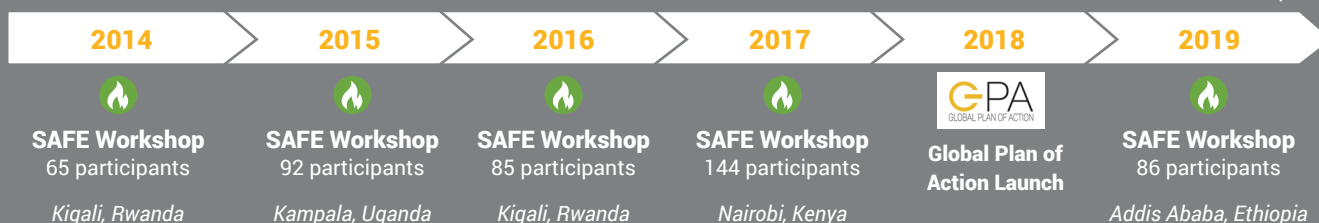
FROM SAFE TO HEC

HEC evolved out of the **Safe Access to Fuel and Energy (SAFE) Workshop**, an annual training event designed to increase the knowledge and capacity of field practitioners to incorporate energy programming into their work with displaced populations. As the humanitarian energy sector grew and diversified between 2016 and 2018, the **SAFE Humanitarian Working Group** recognized an increasing demand for **coordinated action and strategic discussions** among experienced practitioners. The launch of the **Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement (GPA)** in 2018 provided a framework to do just that. The Alliance therefore partnered with UNITAR, the host of the GPA secretariat, to establish HEC in 2019 as the **seminal high-level forum for collaboration among humanitarian energy practitioners**, while the SAFE Workshop focused on introductory knowledge for newer actors. The two events were held back-to-back in 2019.



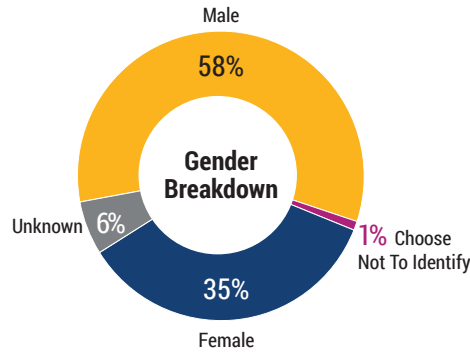
Humanitarian Energy Conference
116 participants

Addis Ababa, Ethiopia

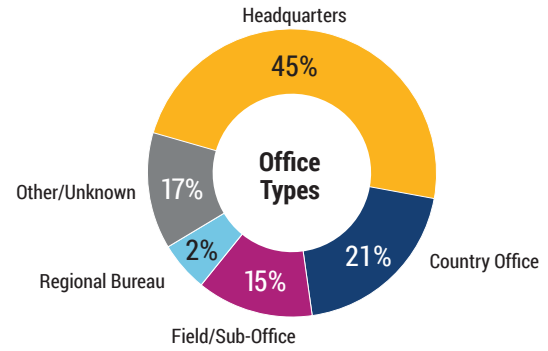


**Note: Due to funding limitations, no SAFE Workshop was held in 2018.*

161
PARTICIPANTS

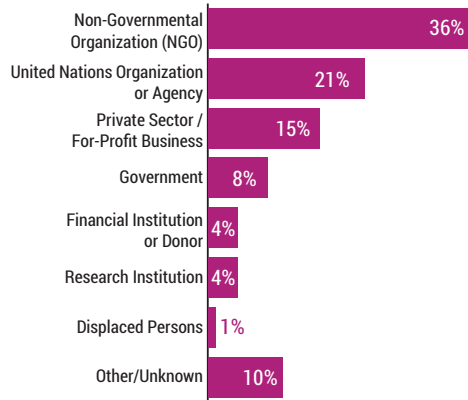


Who Attended

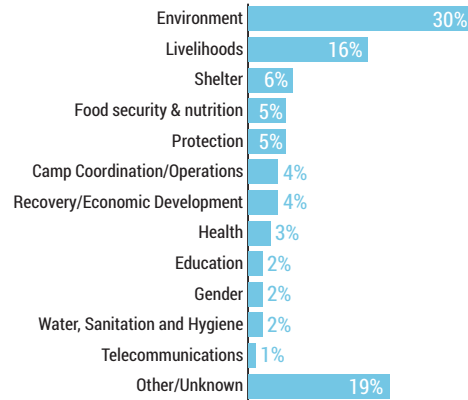


76
ORGANIZATIONS

Stakeholder Breakdown

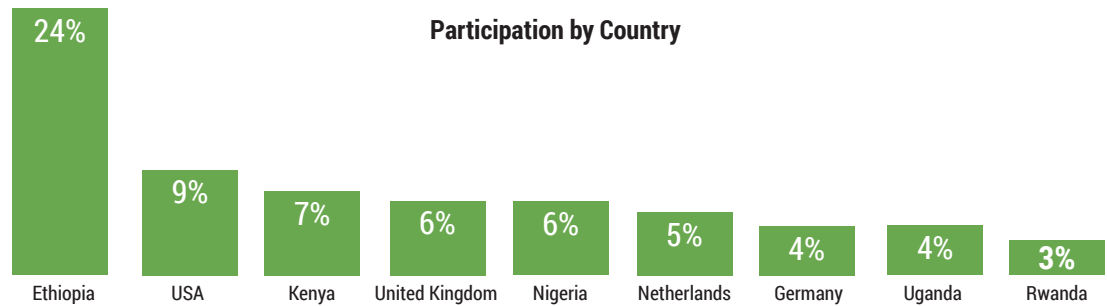


Sector Breakdown



28
COUNTRIES REPRESENTED

Participation by Country



PARTICIPANT OVERVIEW

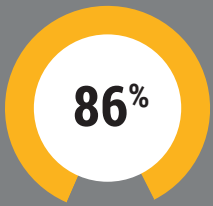
Fostering partnerships among diverse stakeholders was a primary goal of HEC. The above data were collected to inform the program of future events and strengthen outreach to underrepresented groups.

Stakeholder Distribution: Unsurprisingly, most HEC participants represented NGOs and UN Agencies. Private sector participants, however, constituted the third-highest group at 15%. Strengthening outreach to government and funding entities is recommended for subsequent events, as is facilitating greater participation by displaced people.

Sector Participation: A full 30% of HEC participants indicated that environment was the primary focus of their work in relation to energy. Participation from additional sectors should be encouraged to mainstream energy throughout humanitarian assistance.

Country Representation: Sub-Saharan African nations accounted for a combined 57% of HEC participation, with Ethiopia alone accounting for 24%. This level of host country participation is encouraging and should continue to be strengthened in the future.

Gender Balance: Though not unexpected for an international conference, the above ratio of men to women is a signal for participating organizations to advance gender equality among their staff.



86% of participants reported that participatory methods enhanced the conference experience

HEC sought to foster an **open and strategic dialogue** on safe and sustainable humanitarian energy solutions that would **leverage the wealth of existing knowledge and expertise available across the entire community** of practitioners. With this in mind, the Alliance and UNITAR designed HEC to be a participatory event that turned the traditional conference format on its head. Panels and presentations were kept to a minimum in favor of facilitated discussions and small group exercises, which encouraged and enabled contributions from more people through techniques such as fishbowl discussions, mind mapping, and problem-solving.

Human Mapping: Who is Doing What Where?

On day 1, participants connected along the lines of country-based work and learned about existing projects through a “speed dating”-style mapping activity, in which they were asked to organize themselves by where they were working, speak to someone they did not know for three minutes, then rotate to a different individual and another country. Many participants rated this session very highly in the post-event evaluations, describing it as very useful for getting to know other stakeholders.



Action Village: Exploration and Exchange

The Action Village was an exhibition space for HEC participants to explore, discover, and interact. Exhibitors shared their organization’s efforts with other participants in an interactive way, including through the display of energy products (e.g. solar lights, cookstoves, fuels, etc.) and the sharing of research findings, program information, tools, and more. Exhibiting organizations in 2019 included Pesitho, Fosera, SimpliPhi Power, Power Blox, International Lifeline Fund, Inyenyeri, FAO, Practical Action, Dlight, Gaia Clean Energy, and Little Sun.

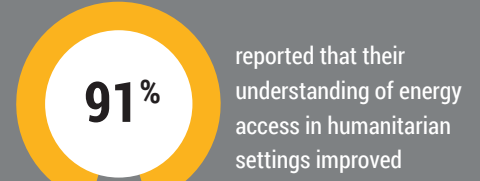
Group Exercises: Solving for Solutions

Throughout both days of HEC, participants worked in small groups, drawing on their own experiences and those of their peers to apply concepts or develop practical solutions. For example, in a session on comprehensive energy response, participants were asked to pick a real project supplied by one group member and go through a step-by-step process to determine whether and how to collaborate with other sectors on an energy intervention, with other group members making suggestions based on their backgrounds.



“ Thoughtful conference design and commitment to its timely execution. *Anonymous* ”

Overall, the feedback from participants was largely positive with a smattering of constructive suggestions and comments for future events. Attendees particularly appreciated the participatory methods employed during HEC and felt that there was a balance between breadth and depth of subject matter given the wide audience and limited time frame. Peer exchange/learning was repeatedly emphasized as a major highlight. One participant described HEC as a “rare opportunity to sit with ‘advanced practitioners’ and discuss openly also weaknesses and implementation challenges, instead of the usual presentations of only success stories.” Participants felt that there was a strong variety of backgrounds. However, some would like to have seen more donors and government representatives at the conference, as well as more focus on humanitarian situations beyond formal refugee camps, such as urban populations and informal settlements. Some participants felt that a future event should be longer (three days or more) and that it should dedicate even more time to discussion and group work during longer sessions. Numerous attendees requested, unprompted, that the event be held again in 2020.



“HEC inspired me to...”

...discuss within my team about the inclusion of energy access approaches in every future project.

Emanuela Cappuccini, COOPI-Cooperazione Internazionale

...share and publicize my own work for others to use and learn from.

Anonymous

...look at project challenges holistically and address them from a community-centered approach.

Ben Butele, GIZ

...move from classical interventions towards designing a comprehensive energy response for fragile communities.

Jean Marc Sika, Hivos



Lightning Talks

Photo by Elena Boffetta/AP



Electrification Lessons & Impact in Azraq Camp, Jordan

Presented by Yasan Abdullah of UNHCR

Azraq camp in Jordan is the first refugee camp in the world to be powered by clean, sustainable energy. What's more, 50 Syrian refugees living in the camp helped to build the solar farm that is now powering their homes and community. Not only is this solar energy meeting refugee needs, but surplus energy is actually being distributed to the local community. This lightning talk explored the life-changing and transformative impacts experienced by the refugee community through the eyes of one of the refugee men who helped to build it.

Photo by Inyenyeri



Kigeme, Rwanda: A Private Sector Success Story in Refugee Energy Access

Presented by Valerienne Maltemps of Inyenyeri

Val is a civil engineer. At the age of six, she was a refugee in the Congo, where she was given the fearful and dangerous task of collecting firewood for cooking. When Inyenyeri opened a shop in Kigeme refugee camp, Rwanda (home to 18,000 Congolese refugees), Val applied for the Manager job. Two years later, she says, there is a new story tell. No girl in a camp need ever suffer like that again. Through Val's personal story, this talk described how Inyenyeri, a Rwandan social enterprise, is delivering a best-in-class clean cooking solution, as well as solar power for phone and appliance charging, to over 13,000 Congolese refugees through a market-based approach for less than \$.05 per person per day.

Photo by UNHCR Bangladesh



A Story of Nature & Refugees in Bangladesh

Presented by Nahin Ferdous of the Clean Cooking Alliance

While many people are familiar with the massive influx of Rohingya refugees into Bangladesh, few are aware of the precarious relationship between the refugees, the host community, and the natural environment in this setting. Touching on elephant migration, reptile incursion, firewood collection, and monsoon landslides, this lightning talk provided an overview of the day-to-day challenges faced by humans and mother nature, including the impacts they have on one another. The talk highlighted an initiative that is shifting refugees away from unsafe and unsustainable firewood dependency through the introduction of LPG fuel, and in doing so, is reducing their exposure to harm, as well as associated environmental challenges.

Photo by Gaia Clean Energy



Building a Sustainable Economy in the Assosa Refugee Camps in Ethiopia

Presented by Wubshet Tsehayu of Gaia Clean Energy

Ethanol, domestically produced from the sugar waste stream, is a clean-burning and cheaply produced fuel. Robust sugar and biofuels industries offer farmers the opportunity to earn cash, stay in business, and take care of their land. In Assosa, UNHCR and Gaia Clean Energy are supporting Ethiopia's emerging biofuels economy by establishing a market for ethanol fuel and stoves. This talk explored how the ethanol initiative has helped women shift from the arduous and dangerous task of firewood collection to gainful employment and income generation through stove production and fuel sales.

Inclusion: Partnering with Crisis-Affected People and Host Communities



Inclusion, a critical principle in humanitarian assistance, constituted a primary theme of HEC. In this case, it referred to two major imperatives. The first, participation, refers to engaging crisis-affected and host communities as partners, rather than beneficiaries, in the development of solutions that affect their lives. Martha Thompson of MIT D-Lab's [Rethink Relief](#) program introduced several participation paradigms and characteristics to help HEC participants think about how this principle could be applied in their work. She then guided them through an exercise to analyze the level of participation by affected populations in sample energy projects. **"It's important to think about who is at the table when decisions are being made,"** Thompson said, noting challenges in operationalizing this principle. **"Those voices are going to define the answers."** Numerous session participants mentioned that they had neither thought of participation to this extent before, nor had they considered actively inviting participation from community members.

Energizing Humanitarian and Private Sector Partnerships

Collaboration between humanitarian and non-humanitarian actors constituted the second inclusion imperative emphasized at HEC: diversification. With forced displacement reaching record levels, the humanitarian sector cannot meet the needs of all crisis-affected people on its own. As a multi-sectoral issue, energy access presents a significant opportunity for cross-sector collaboration, especially between private companies and humanitarian agencies. Currently, however, such partnerships are often stymied by bureaucracy, mistrust, and lack of precedents to guide procedure.

Drawing on lessons learned by the [Alianza Shire](#) partnership for energy access in refugee camps, HEC participants were invited to map implementation challenges and solutions for three potential pathways of private sector engagement in humanitarian energy interventions: bulk sale of products to humanitarian agencies (procurement), direct sale to crisis-affected people in their communities (a "kiosk" model), or provision of broad fuel or energy services to an entire community (a utility model). Suggested solutions from this exercise included applying quality standards for energy products in humanitarian procurement processes, training households on financial literacy to support the kiosk model, and clearly defining delivery roles and responsibilities early on for the utility model. **"Public sector, private sector, humanitarian organizations, universities, everyone has different backgrounds,"** said Javier Mazonra, Coordinator of Alianza Shire. **"The key for successful multi-stakeholder partnerships lies in each actor contributing its own core skills and capabilities."**



Innovative Finance: Branching Out from Donor Funding



Financing humanitarian energy solutions was the common theme of HEC's two most popular sessions. Kate Montgomery of Acumen Fund led a discussion on this topic from the supply side – focusing on the need for humanitarian energy initiatives to go beyond short term, donor-based funding in order to reach scale. Referencing sustainable business models piloted by social enterprises such as d.light, Biolite, and Burn Manufacturing, Montgomery highlighted the **opportunity to support the expansion of these models in humanitarian settings through innovative finance mechanisms such as results-based financing, equity, debt, guarantees, and climate financing.**

Challenges towards implementing such options were raised in a subsequent fishbowl style discussion with participants, such as the need to de-risk investment, the limited bureaucratic processes through which humanitarian agencies can currently engage the private sector, and the ethics surrounding the use of public funds to incentivize eventual profit-making endeavors in situations produced by crisis. “This [discussion] won’t change everything,” Montgomery stated at the close of the session, “but it urges people to take risks, try new things, and learn from each other.”

Cash, Markets, and Why They Matter

Financing of humanitarian energy solutions is also needed on the demand side. The growth of cash-based assistance in humanitarian response presents an **opportunity to scale energy access programs and interventions by enabling crisis-affected people to afford them.** In this session, Sara Murray of Mercy Corps guided participants through an exploration of trends in cash and markets programming and steps for responding to a shifting humanitarian landscape.

For the opportunity of “cash for energy” to manifest, humanitarian practitioners must ensure that energy needs are included in basic needs assessments and calculated in Minimum Expenditure Baskets – criteria that are used to determine the value and expected use of cash transfers. **“We also need to up our game on strengthening markets for key energy products when they are weak,”** Murray said. **“There is a lot of room for learning and innovation in this area.”**

Drawing on insights from their own experiences, participants in the session noted that humanitarian energy needs are not yet being fully met and that the humanitarian community should help to strengthen markets in order to increase access to critical energy services for crisis-affected people.



Mitigating Protection Risks & Meeting Energy Needs

Protection and the prevention of gender-based violence (GBV) continue to be major priorities in responding to the energy needs of crisis-affected communities. This session, led by GBV and energy expert Megan Gerrard, first unpacked relevant protection risks and challenges through case studies and examples. Participants then worked together through a collaborative mind-mapping exercise to explore needs, barriers, and solutions to better ensuring that energy response programs mitigate associated protection risks and take into consideration the risks faced by affected populations. Participants came up with numerous recommendations, which are captured below.



Photo by UNHCR B. Bannan

TRAINING RECOMMENDATIONS	SECTOR RECOMMENDATIONS
<ul style="list-style-type: none"> • Develop and launch a training of trainers to ensure depth and breadth of knowledge at the local level • Integrate participatory methods for enhanced inclusion • Incorporate approaches for safely gathering protection-related information from community members • Better mainstream protection across energy and environment writ large 	<ul style="list-style-type: none"> • Employ and deploy energy and protection experts • Improve monitoring and evaluation to document associated protection needs, outcomes, and impacts • Increase funding to move beyond the pilot phase to ensure long-term impacts • Implement multi-sectoral programming to address the multi-sectoral nature of energy needs and challenges

Building Energy Capacity in Humanitarian Settings

Significant gaps in energy-related expertise and knowledge exist at all levels and across all geographies in the humanitarian sector, slowing and preventing meaningful progress. A group of practitioners including NORCAP, the World Food Programme, and Mercy Corps has been supporting capacity development for humanitarian energy response under Working Area IV of the GPA Framework.² In this session, the working group shared the results of recent research on capacity gaps and invited HEC participants to help identify the most urgent challenges to be addressed. Participants were then challenged to develop small-scale roadmaps for overcoming those challenges, as shown below.

CHALLENGES	SOLUTIONS
<ul style="list-style-type: none"> • Absence of a common set of core competencies for energy project design and implementation in humanitarian settings • Dearth of existing technical energy expertise across the humanitarian system in comparison with the need • Lack of a common sharing platform to learn from experiences and projects 	<ul style="list-style-type: none"> • Increasing access to technical energy expertise • Integrating end-user training needs • Developing a common learning agenda with standard energy training curriculum for humanitarian practitioners

² The GPA Framework identifies five major challenge areas for improvement in humanitarian energy access: Planning and Coordination; Policy, Advocacy, and Host Country Resilience; Innovative Finance; Technical Expertise, Capacity Building, and Training; and Data, Evidence, Monitoring and Reporting. Each area is addressed by a volunteer working group whose membership is open to all. Practitioners are invited to email energy@unitar.org to learn more about sector capacity building priorities and how to join the working group.

Technology & Fuel

Electrification: To Be On Grid or Off Grid?

Sustainable electricity in humanitarian settlements – whether for operational, community, or household purposes – is a relatively new and rapidly developing area of interest. In this session, practitioners from the IKEA Foundation, GIZ/ENDEV, IOM, and Alianza Shire shared case studies of humanitarian electrification projects, including Azraq camp's large-scale solar farm in Jordan, Kalobeyi settlement's mini-grid in Kenya, solarization of humanitarian operations in South Sudan, and extension of the national grid to refugee settlements in Tigray, Ethiopia. Thomas Fohgrub of UNITAR then moderated an open discussion among presenters and session participants about how appropriate solutions were determined for each context. Topics ranged from standards and recycling electronic waste to the importance of cultivating champions in government, UNHCR, and the donor community to advance electrification projects. **Participants highlighted financial sustainability, private sector engagement, understanding consumption habits, protecting new systems, and ensuring quality and maintenance as key considerations for future projects.**



Photo by Edoardo Santangelo/Practical Action

Cooking: The Unsolved Problem

Despite being the earliest energy challenge acknowledged by the humanitarian sector, the development of effective and scalable solutions for cooking are lagging behind those for lighting, phone-charging, and other off-grid energy applications. One

of several reasons for this, explained Kathleen Callaghy of the Clean Cooking Alliance, is that cooking cannot yet be addressed reliably, affordably, and at scale through electrification. Most off-grid cooking solutions therefore require some form of fuel – liquid, solid, or gas – which must be continually sourced, prepared, and transported by users or practitioners.



Photo by Jiro Ose/Chad

In a subsequent fishbowl-style discussion, Desalegn Getaneh of Gaia Clean Energy and Valerienne Maltemps from Inyenyeri touched on logistical and practical challenges in their work to bring safe and sustainable fuel options to refugees in Ethiopia and Rwanda. Inconsistent delivery of cash transfers and interruptions in fuel supply, for example, resulted in households having to resort to traditional cooking methods. Other participants rotated into the discussion or posed questions ranging from technology and distribution methods to the feasibility of scaling solutions beyond small pilot projects. Overall, the session demonstrated the need for **serious investment, sustained effort, and active cross-sector collaboration to achieve access to safe and sustainable cooking solutions for all crisis-affected people.**





Looking Forward

The 2019 Humanitarian Energy Conference affirmed that the humanitarian energy community is larger and more diverse than ever before. To move forward strategically and effectively, the Alliance developed the following recommendations from participant feedback, partner consultations, and facilitator observations from the 2019 HEC, the 2019 SAFE Workshop, and prior events.

SECTOR RECOMMENDATIONS

-  **Improve multi-sector coordination on humanitarian energy access**, particularly as the community of stakeholders grows and diversifies.
-  **Significantly increase the participation and inclusion of crisis-affected people** in the design and development of energy solutions that affect their lives.
-  **Foster partnerships between humanitarian and non-humanitarian actors**, especially host country governments, private sector actors, and financing institutions.

EVENT RECOMMENDATIONS

-  **Host the Humanitarian Energy Conference annually** to address strategic issues and enable continued coordinated action on humanitarian energy access.
-  **Increase the participation of underrepresented stakeholders**, especially crisis-affected people, through targeted outreach, language support, and early coordination.
-  **Increase focus on non-refugee populations and urban displaced people** in future event programs to improve awareness of communities outside of formal camps.
-  **Allow more time** for participants to reflect on discussions and co-create solutions.



STAY ENGAGED

- ✓ **Join the SAFE Community** and follow [@SafeFuelEnergy](https://twitter.com/SafeFuelEnergy) on Twitter to receive updates on upcoming events, new research, and the latest news in humanitarian energy access.
- ✓ E-mail energy@unitar.org to inquire about the Global Plan of Action (GPA) thematic area working groups.
- ✓ Visit [ENERGYCoP](https://www.energycop.org) and [EnergyPedia](https://www.energypedia.org) for access to resources and tools.
- ✓ Contact info@safefuelandenergy.org with questions or requests.

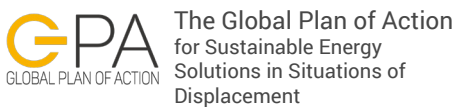


Photo by Edoardo Santangelo/Practical Action

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